

CLUSTAL W (1.7) Multiple Sequence Alignments

Sequence type explicitly set to Protein
Sequence format is Pearson

B. subtilis		Coax					
dbj	BAA21476.1	D. vulgaris	258 aa	sp	O51477	B. burgdorferi	262 aa
gb	AAD35964.1	T. maritima	212 aa	sp	P74045	Synechocystis	257 aa
pir	T36391	S. coelicolor	246 aa	sp	O25533	H. pylori	223 aa
sp	Q45338	B. pertussis	265 aa	sp	O67753	A. aeolicus	229 aa
sp	O06282	M. tuberculosis	267 aa	sp	Q9RX54	D. radiodurans	262 aa
gb	O93446	T. pallidum	272 aa	WIT	RCA03301	C. acetobutylicum	250 aa
			273 aa	WIT	RRC02473	R. capsulatus	258 aa

B. subtilis	Coax	-----MLLVIDVGNNTNTVLGVYHDG-----KLEYHWRIE
WIT	RCA03301 C. acetobutylicum	NKRAAFMLLLFLRSVLKVILVDVGNNTNIVLGIYNDT----KLTAEWRLS
pir	T36391 S. coelicolor	-----MLLTIDVGNTHTVLGLFDGE-----DIVEHWRIS
sp	O06282 M. tuberculosis	-----MLLAIDVRNTHTVVGLLSGMKEHAKVVQWRIR
WIT	RRC02473 R. capsulatus	-----MLLCIDCGNTNTVFSVWDGT----DFAATWRIA
dbj	BAA21476.1 D. vulgaris	-----MTQHFLFDIGNTNVKIGIAVET----AVLTSYVLP
sp	Q9RX54 D. radiodurans	-----MPAFPLLAVDIGNTTTVLGLADASG----ALHTTWIR
gb	AAD35964.1 T. maritima	-----MYLLVDVGNTHSVFSITEDG----KTFRRWRLS
gb	O93446 T. pallidum	-----MLLIDVGNSHVVGIGIQGENGGRVCVRELFRLA
sp	O51477 B. burgdorferi	-----MNKPLLSELIIDIGNTSIAFALFKDN----QVNLFIKMK
sp	O67753 A. aeolicus	-----MRFLTVDVGNSSVDIALWEGK-----KVK
sp	P74045 Synechocystis	-----METSKPGCLALDNDKQKPWLGLMIGN----SRLHWAYC
sp	O25533 H. pylori	-----MPARQSFDDLKN---LVLCDIGN-----TR
sp	Q45338 B. pertussis	-----MIILIDSGNSRLKVGFDPDPDAP--QAAREPAPV

FIG. 6B

B. subtilis	Coax
WIT	RCA03301 C. acetobutylicum
pir	T36391 S. coelicolor
sp	O06282 M. tuberculosis
WIT	RRC02473 R. capsulatus
dbj	BAA21476.1 D. vulgaris
sp	Q9RX54 D. radiodurans
gb	AAD35964.1 T. maritima
gb	O93446 T. pallidum
sp	O51477 B. burgdorferi
sp	O67753 A. aeolicus
sp	P74045 Synechocystis
sp	O25533 H. pylori
sp	Q45338 B. pertussis

TSRHKTEDEFGMILRSLFDHS-----GLMFEQIDGIISSVVPPIMFALER
 TDVLRSADEYGIQVMNLFQOD-----KLDPTLVEGVIISSVVPNIMYSLEH
 TDSRRTADELAVLLQGLMGMPHLLGDELGDIDGIAICATVSPSVLHELRE
 TESEVTADELALTIDGLIG-----EDSERLTGTAALSTVPSVLHEVRI
 TDHRRTADEYFVWLNTLMQLK-----GLQGRISEAIISSSTAPRVVFNLRV
 TDPGQTTDSIGLRLLEVLRHAG-----LGPADVACVASSVVPVGNPLIRR
 TNREMLPDDDLALQLHGLFTLA-----GAP-IPRAAVLSSVAPPVGENYAL
 TGVFQTEDELFSHLHPLLG-----DAMREIKGIGVASVVPTQNTVIER
 PDARKTQDEYSLLIHALCERAG-----VGRASLRDAFISSVVPVLTKTIA
 TNLMLRYDEVYSFFEENFDEN-----VN---K-VFISSVVPILNETFKN
 DFLKLSHEEFLKEEFPKLK-----ALGISVKQSFSEKVRG
 SGNAPLQTTWVTYDYNPKSAQLP-----VLLGKVPLMLASVUPE
 IHFAQNYQLFSSAKEDLKR-----LGIQKEIFYISVNEE
 AFDNLDLDALGRWLATLPRRP-----Q-----RALGVNVAGLARGEAIA

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WIT	RCA03301 C. acetobutylicum
pir	T36391 S. coelicolor
sp	O06282 M. tuberculosis
WIT	RRC02473 R. capsulatus
dbj	BAA21476.1 D. vulgaris
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gb	AAD35964.1 T. maritima
gb	O93446 T. pallidum
sp	O51477 B. burgdorferi
sp	O67753 A. aeolicus
sp	P74045 Synechocystis
sp	O25533 H. pylori
sp	Q45338 B. pertussis

MCTKYFHIEPIQIVG-PG-MKTGLNIKYDNPKEVGADRIVNAVAIAHLYG-
 MIRKYFKINPLVVG-PG-IKTGINIKYDNPKEVGADRIVNAVAIAHEIYK-
 VTRRYGDDVPAVLVEPG-VKTGVPILTDHPKEVGADRIINAVAAVELY-
 MLDQYWSPVPHVLIIEPG-VRTGIPLLVDNPKEVGADRIVNCIAAYDRFR-
 LCNRYFDCRPYVVGKPG-CELPVAPRVDPGTTVGPDRLVNTVAGYDRHG-
 ACERYL---YRKLLFAPGDIAIPLDNRYERPAEVGADRLVAAAYARRLYP-
 ALKRHFMDAFAVSAEN---LPDVTVELDTPGSVGADRLCNLFGAEKYLG-
 FSQKYFHIPIWVAKN---GCVKWNVKNPSEVGADRVANVAVFVKEYG-
 AVAQISGVQPVVFGPWAYEHLPVRIPEPVRAEIGTDLVANAVAAVHFR-
 VIFSEFKIKPLFIGFDLNYDLTFNPKSKDKFLLGSDVFANLVAIENYS-
 KIPKIK-----FLKKEN---FPIQVDYKTPETLGTDRVALAYSAKKFFG-
 QTEVWRVYQPKILTILKN---LPLVNLYP---SFGIDRALAGLGTGLTYG-
 NEKALLNCYPNAKNIAG---FFHLETDYVG---LGIDRQMACLA---VN---
 ATLRAGGCCDIRWLRQAP-LAMGLRNGYRNPDLGLGADRWACMVGLARQPS

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pir	T36391 S. coelicolor
sp	O06282 M. tuberculosis
WIT	RRC02473 R. capsulatus
dbj	BAA21476.1 D. vulgaris
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sp	P74045 Synechocystis
sp	O25533 H. pylori
sp	Q45338 B. pertussis

[illegible]

FIG. 6D

B. subtilis	Coax	----	VIATGG	----	LAPLIANES	----	DCIDI	VPFL	TLKGL	ELI
WIT	RCA03301	C. acetobutylicum	RTSLV	LATGG	----	LAKLIN	----			
plr	T36391	S. coelicolor	DDVT	VIATGG	----	LAPMVL	GES	----	SVIDE	HEPWL
sp	006282	M. tuberculosis	HDVA	IVATGH	----	TAPLL	PEL	----	HTVD	HYDQHL
WIT	RRC02473	R. capsulatus	--MKV	VIATGG	----	LASL	FDLGF	----	DLFD	KVEDDL
dbj	BAA21476.1	D. vulgaris	----							
sp	Q9RX54	D. radiodurans	--AVA	VATGG	----	FSRTV	QIC	----	QEI	DYDE
gb	AAD35964.1	T. maritima	----	VLTGG	----	QSKI	VK-DM	----	IKHE	IFDE
gb	093446	T. pallidum	--CAV	ITGG	----	LSRL	FS-SE	----	VD	FPIDA
sp	051477	B. burgdorferi	--FNL	ITGG	----	NADLL	SLI	----	EIE	FIFNI
sp	067753	A. aeolicus	--FKV	VITGG	----	EKYS	----	----	KGI	YDPLL
sp	P74045	Synechocystis	--AMV	ITGG	----	DGKIL	HGFL	KEHSP	NLSVA	WDNLI
sp	025533	H. pylori	----	YLCGG	----	DAKYL	SAFL	----	PHSV	CKERL
sp	Q45338	B. pertussis	----	EIVY	AGGWP	EVRRQ	EAE	RLLA	VTGA	AFGAT
B. subtilis	Coax	----	YERN	RVGSV	----					
WIT	RCA03301	C. acetobutylicum	----							
plr	T36391	S. coelicolor	YERN	VSRM	----					
sp	006282	M. tuberculosis	FERN	LEVQ	RGR	LKTAR	----			
WIT	RRC02473	R. capsulatus	----	FDYN	KLGA	----				
dbj	BAA21476.1	D. vulgaris	----							
sp	Q9RX54	D. radiodurans	WASR	SEVR	----					
gb	AAD35964.1	T. maritima	CFGD	----						
gb	093446	T. pallidum	ARLV	PTSL	LPATV	SGSSGN	----			
sp	051477	B. burgdorferi	GNSI	DEK	EVN	----				
sp	067753	A. aeolicus	LYLY	HRI	----					
sp	P74045	Synechocystis	HHGD	RPI	C	----				
sp	025533	H. pylori	LKK	AGILE	CK	----				
sp	Q45338	B. pertussis	AAQ	GAP	TA	----				